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Mr. Tracy Butler, PE  
Director of Engineering  
Apex Clean Energy, Inc.  
310 4<sup>th</sup> Street NE, Suite 300  
Charlottesville, VA 22902

Dear Mr. Butler,

Timmons Group has reviewed the fall heights for five (5) distinct wind turbine generators that are proposed for the Great Pathfinder Wind Project located in Webster and Boone County, Iowa, south of Stratford. The five (5) wind turbines we have analyzed are the Vestas V150-4.2MW, the Vestas V150 5.6MW, the Nordex N149 4.8MW, the GE 140 3.03 MW and the Siemens-Gamesa SG145 5.0 MW.

Based on our review of the documentation associated with each respective turbine manufacturer's specifications we have determined that the fall zones heights are as shown in the following table.

Proposed Turbine Models	Nameplate Capacity (MW)	Hub Height (Feet)	Rotor Diameter (Feet)	Tip Height (Feet)	Fall Zone Distance (feet)
Vestas V150	4.2	344.5	492.1	590.6	590.6
Vestas V150	5.6	344.5	492.1	590.6	590.6
N149	4.8	354.3	488.8	598.6	598.6
GE140	3.03	321.5	459.3	551.2	551.2
SG145	5	336.3	475.7	574.1	574.1

Thank you,

Robert I. Gonzalez, PE  
Director of Wind Engineering  
*Licensed in AZ, D.C, ID, OR, SD, TX, UT, WA*